# Vertex 3.20 SATA 3.0 Solid State Drive

***Built with Leading-Edge 20nm NAND Flash***

The OCZ Vertex 3.20 SSD is built around smaller, state-of-the-art 20nm NAND flash process geometry, extending its availability and enabling mainstream users of mobile and desktop platforms to improve gaming, multimedia, and the overall computing experience over traditional hard disk drives and other competing SSDs.

| PERFORMANCE | 120GB | 240GB |
|---|---|---|
| Sequential Read Speed | 550 MB/s | 550 MB/s |
| Sequential Write Speed | 520 MB/s | 520 MB/s |
| Random Read Speed (4K, QD32) | 20,000 IOPS | 35,000 IOPS |
| Random Write Speed (4K, QD32) | 40,000 IOPS | 65,000 IOPS |
| Max Random Read Speed (4K) | 20,000 IOPS | 40,000 IOPS |
| Max Random Write Speed (4K) | 90,000 IOPS | 90,000 IOPS |

## PHYSICAL SPECIFICATIONS

| | |
|---|---|
| Usable Capacities | 120GB, 240GB |
| NAND Components | 20nm Multi-Level Cell (MLC) Flash |
| Interface | SATA 3.0 6Gb/s |
| Controller | SandForce® SF-2281 |
| Form Factor | 2.5-inch |
| Dimensions | 99.8 (L) x 69.63 (W) x 9.3 mm (H) |
| Drive Weight | 83g |

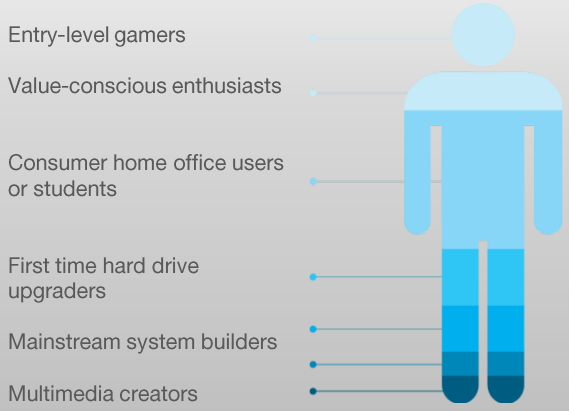
## ENVIRONMENTAL SPECIFICATIONS

| | |
|---|---|
| Power Consumption | Idle: 0.55W Active: 2.15W |
| Operating Temperature | 0°C ~ 55°C |
| Storage Temperature | -45°C ~ 85°C |
| Shock Resistance | 1500G/0.5ms |
| Vibration (Operational) | 2.17Grms (7-800Hz) |
| Vibration (Non-operational) | 16.3Grms (20-2000Hz) |
| Certifications | RoHS, CE, FCC, KCC, C-Tick, VCCI, BSMI |

## RELIABILITY / COMPATIBILITY SPECIFICATIONS

| | |
|---|---|
| Data Path Protection | ECC corrects up to 24 random bits/512B |
| Product Health Monitoring | Self-Monitoring, Analysis and Reporting Technology (SMART) Support |
| Endurance | Rated for 20GB/day of host writes for 5 years under typical client workloads |
| MTBF | 2 million hours |
| Serial ATA | Fully compliant with Serial ATA International Organization: Serial ATA Revision 3.0. Fully compliant with ATA/ATAPI-8 Standard Native Command Queuing (NCQ) |
| Operating Systems | Windows, Mac, Linux |

## For Mainstream Computing Applications




## Benefits of MLC vs. TLC

- Higher program erase (P/E) cycles
- Reliable data retention
- Lower read/access latency
- Higher lifetime endurance
- Adoption in both consumer / enterprise
- Cost-competitive, “bang for the buck”

## Ordering Information

| Drive Model | Part Number | UPC |
|---|---|---|
| 120GB | VTX3-25SAT3-120G.20 | 842024033691 |
| 240GB | VTX3-25SAT3-240G.20 | 842024033707 |